Approaches to Implementing Service Lines

A Case Study

By Natalie Pobirsky, MPH; Joshua P. Rising, BA and Martin P. Charns, DBA

The 1995 reorganization of the Veterans Health Administration (VHA) into twenty-two networks, or VISNs, created a significant opportunity for innovations in health care delivery. One area where networks have substantially diverged has been in the development and management of service line structures. While some networks moved forward rapidly into service line implementation, others used service lines only tangentially.

In the next three issues, Transition Watch will examine three networks that have made the most extensive changes in implementation of service lines. Although all three utilized service lines, each network differed in the types of service line structures selected (e.g., task forces or teams) and in the manner in which service lines were deployed. VISN 2, also known as the VA Healthcare Network Upstate New York and the subject of this case study, proceeded rapidly to a service line structure that entrusted each network-level service line with a great deal of authority. VISNs 10 (Veterans Healthcare Network of Ohio) and 13 (VA Upper Midwest Health Care Network), the subjects of the next two articles, have also implemented extensive organizational changes. The comparisons among these VISNs may be informative for those considering developing a service line structure.

VISN 2: VA Healthcare Network Upstate New York

In 1995, VISN 2 was one of three VISNs located in the Northeast region of the country and was one of the smaller networks. VISN 2 comprised five VAMCs in Albany, Bath, Buffalo, Canandaigua, and Syracuse, and served an estimated veteran population of almost 440,000. The VISN was also among the hardest hit by the VA's Veterans Equitable Resource Allocation (VERA) methodology, experiencing a 5% reduction from historical, pre-VERA funding levels between fiscal years 1996 and 1997.

Prior to the inception of VISN 2 in October 1995, several medical centers within the network had already initiated reorganization activities. For example, the Buffalo VAMC restructured its facility into service lines

prior to VISN implementation. Some of Buffalo's managers and staff served as consultants to the VISN when the network moved forward with reorganization. Additionally, the creation in March 1995 of the Western New York Health Care System, which consisted of the Buffalo and Batavia medical centers and the Rochester outpatient clinic, meant that a number of individuals in the VISN already had experience coordinating clinical responsibilities among multiple locations.

The Executive Leadership Council (ELC), the VISN's senior management group, initiated a number of additional councils soon after network activation. The five original councils consisted of 1) Mental Health (MH); 2) Geriatrics and Extended Care (GEC); 3) Primary Care (PC); 4) Medical/ Surgical (M/S); and 5) Diagnostics and Therapeutics (D&T). Two of these councils, MH and GEC, comprised representatives from most of the medical centers in the VISN, and had been meeting even before the ELC formally initiated the five councils. Two other councils, PC and M/S, met as stand-alone committees for only a short period of time before they were combined into one. This was due to the small amount of tertiary services performed in the VISN, and because of the belief that it was too difficult to divide patients and clinicians between the two councils. Frederick Malphurs, the Network Director, discussed some of the early success of the councils:

> *I gave all the service lines and all of the medical centers the task of cutting their budget. The Mental Health Council came with some extraordinarily good [recommendations], better than medical centers because the council can look across [the] network. [This] reaffirmed my belief in… service lines. [There are] too*

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> *many special interests closer to the facility that get in the way of good management. [Service lines] helped to break down some barriers.*

Structural Form

Encouraged by these early achievements, Mr. Malphurs felt that more aggressive steps would help generate further spending cuts and meet several network-wide performance standards including measures of bed days of care (BDOC), hospital cost per BDOC, hospital average length of stay, primary care enrollment, mental health follow-up after discharge, and patient satisfaction. One network staff member commented on the need for a different service line structure:

> *The council structure did not support the rapid cycle changes, for getting the 'lessons learned' quickly communicated across the network, and to standardize to best practices.*

In October of 1996, the VISN, led by Mr. Malphurs, held a retreat to discuss steps to move forward with a more advanced service line structure. The ELC chartered an Implementation Team to develop a plan and make recommendations; the team submitted its plan in just four weeks. The Implementation Team proposed establishing four care lines[1] and a "service line"; the latter encompassing the responsibilities related to a network business office, organizational performance, and facilities management. The four care lines created were Medical/Surgical, Geriatrics and Extended Care, Mental Health, and Diagnostics and Therapeutics.

VISN 2 leadership determined that while primary care was a focal point of patient care in any integrated delivery system, primary care was not to be carved out as its own care line. Instead, these services were incorporated into the remaining care lines, with the Medical/Surgical care line managing the majority of the primary care functions. Leadership felt that by doing so, the network would be in a better position to coordinate providers to meet both clinical and psychosocial patient needs. VISN 2 leadership also believed that because primary care was closely tied to many other health care services, creating a separate primary care line would promote clinical care segmentation and disorder. Furthermore, by sharing primary care functions across care lines, the VISN hoped to minimize the idea that patients belonged to any specific care line, but rather the care line services belonged to the patients.

The proposal also called for a full-time, clinically-oriented, care line manager to head each care line office. These network-level care line managers (NCLMs) would have full budgetary control within their care lines, and line authority over local care line managers. Supporting the NCLM would be an administratively-oriented care line chief operating officer (COO) and a care line council, composed of local care line managers, labor, discipline representatives, and stakeholders. Line authority moved to the care lines in October of 1997, and budget authority followed shortly thereafter.

Care Line Implementation

As a result of the transition to care lines, questions arose regarding the function of the facility director. With line and budget authority shifted to care lines, the role of the facility director could be much reduced. Mr. Malphurs responded by assigning all of the VAMC directors dual roles as network vice presidents with responsibility for VISN-wide initiatives such as enrollment and marketing. Facility directors also continued to control human resources functions, labor relations, and facility management along with their new network roles.

Phillip Thomas, director of the Syracuse medical center and chair of the Implementation Team, described the factors he used in selecting local care line managers:

> *At Syracuse, there were enough people who were good to pick, but many of them lacked some of the skills they needed, like budget. The selection was more about vision and risk-taking than it was about particular administrative competencies and skills.*

The VISN placed a priority on providing the care lines with the necessary skills to operate their own budgets. This duty generally rested on the shoulders of the chief operating officer. A shadow budget was used in 1997 to provide the care lines with a learning opportunity, and then full budgetary authority was granted in 1998.

Challenges of the Change Process

The most significant challenge facing VISN 2 both currently and in upcoming years will be to ensure that professional development and identity do not suffer under care line restructuring. Since care line reorganization

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[1] The Implementation Team decided to use the nomenclature 'care line' to describe what VHA would otherwise term a 'service line' (see *Transition Watch*, Fall 1998) and used 'service line' to describe a support service principally focused on business functions. Here we will use VISN 2's terminology.

ultimately led to the loss of traditional hospital services such as nursing and social work, several staff voiced concerns regarding the continuation of professional identities and the formation of new leadership roles.

Several managerial role transformations led to significant barriers to the change process for VISN 2. Two medical center positions that were notably affected by care line reorganization were that of the chief of staff (COS) and the service chief. As part of the implementation process, the title of COS was formally changed to "physician executive" (PE). While PEs no longer retained direct line authority over medical staff, most were still responsible for matters involving professional development, credentialing, and other academic issues. Service chiefs were also asked to assume new titles and responsibilities. For instance, the position of the chief of nursing service became known as the "nurse executive" (NE) and served to maintain the professional integrity of the nursing discipline. One NCLM stated:

It's been hard for those of us used to the old model of service chiefs. My role on the Implementation Team enabled me to prepare my nursing staff and let them know they needed to assess their skills and think about the future. Some service chiefs embraced the new model, but some unfortunately still believe in the old VA.

Many respondents linked the professional concerns to a lack of strong local clinical leadership presence. Others felt that care line reorganization went too far in eliminating the service chief positions and changing the chief of staff role into that of physician executive. By establishing a balance between local and network leadership, particularly for nurses and physicians, VISN 2 leaders hope to contend with these and other professional concerns.

Some leaders did not feel the new responsibilities were right for them. Consequently, almost all of the chiefs of staff and facility directors in place at the inception of the VISN had left or retired once care lines were implemented and care line directors were appointed.

Another problem associated with care line implementation involved the technological transition of budgetary authority to care lines. Specifically, the VISN's information systems did not consistently support the new care line structure. In several cases, staff had to manually calculate financial and performance information for each care line.

Enablers of the Change Process

Many managers in VISN 2 felt that the overall budget constraints under which VISN 2 was forced to operate undoubtedly contributed a great deal to the network's move to care lines. The budget crisis forced individuals to realize that change was needed, but due to simultaneous staffing cutbacks, some people associated care lines with layoffs. Network staff worked hard to avoid this perception.

Another enabler was the network leadership. Mr. Malphurs was extremely committed to moving ahead with a care line structure; without his guidance the network may not have initially decided to implement this structure. Other network staff were equally important. Mr. Thomas described his role in the new organization:

The role of the director has changed dramatically. I spend a lot of time feeding the young birds in the nest [the local managers] who lack budget and program management experience. They are struggling to meet the unique network expectations. It takes a lot of my time mentoring them, and taking care of them emotionally because of the high level of anxiety… We don't want to make mistakes so we take the time to work things through. It takes a lot of my time. It would be very different with another director.

Conclusion

By 2000, VISN 2, aided by its network staff and budget crisis, had progressed the farthest in implementation of care line structures among all of the VHA networks. Not all of the facilities within VISN 2 dealt equally well with this change. Some facilities, such as historically under-funded Syracuse and the Western New York Health Care System, which had prior experience with care lines, were excited by the new system. But for other facilities, such as Canandaigua, which was a high-cost outlier, and Albany, which had a strong medical school affiliation, the change was not always perceived in a positive manner.

Many VISN 2 leaders felt that care line restructuring had benefited VISN 2 in numerous respects. In 1999, the network was not only the second highest budget gainer, due in part to its success in enrolling new veterans, but it was also ranked second among all VISNs in patient satisfaction. The latter accomplishment is of particular importance given that VISN 2 rose from the thirteenth position in patient satisfaction in 1995, while simultaneously reducing expenditures. VISN 2 was also the first network to be awarded the Quality Achievement Recognition Award, given by Dr. Kizer to recognize quality improvement. VISN 2 leadership further believed that shifting full personnel and budget authority to the care line managers was a very important element in the care line reorganization process.

Effects of Facility Integration

By Carol VanDeusen Lukas, EdD, and Kamal Desai, PhD

In the last six years, close to 50 VA medical centers integrated to form new VA health care systems. As we have described in earlier *Transition Watch* articles, these integrations have progressed at different rates and have adopted a variety of structures. At a broad level, however, they share objectives of improving their health care systems in terms of quality, access, efficiency and redirection of resources. In this article, we look at the performance of integrating systems.

In the private sector, the early wave of hospital mergers typically focused on administrative consolidations to achieve savings through economies of scale, or on the creation of corporate umbrellas for contracting and marketing to increase market share. The results were disappointing. More recently, attention has shifted to integrated delivery systems that seek to add value by providing coordinated clinical care, as well as striving for system-wide efficiencies. The assumption is that clinical integration is key to meeting system objectives. While this approach is promising, its success has not been rigorously documented. Since VA generally aims to create integrated delivery systems rather than to simply merge two medical centers administratively, VA's experience offers an opportunity to look carefully at the effects of integrated delivery systems.

VA integrated systems have multiple objectives.

We looked at the impact of integration on four dimensions linked to the broad integration objectives that VA integrated system directors rated as important when surveyed in November 1998:

1. **Cost savings/system efficiency:** To meet the objective of cost savings, we expect integrated systems to streamline administrative operations and thus be able to eliminate redundant structures, positions, supplies and equipment. We also expect

them to create more coordinated delivery systems among previously independent, often competing, institutions. As the streamlining and coordination make the system more efficient, we expect to see proportionally lower total costs and lower staffing in relation to workload.

2. **Redirection of resources from administrative to clinical care:** As systems become more efficient and realize cost savings, we expect them to use those savings to meet a second integration objective: redirecting resources to clinical services in order to expand and improve patient care. As indicators of redirected resources, we expect to see higher proportions of staffing and costs associated with clinical care.

3. **Improved access to care:** As a system becomes more efficient and as resources are directed to expand patient care, access for veterans should improve. However, two integration dynamics work in a counter direction. First, in a system where a high proportion of services is consolidated to one campus, patients may feel that their access is diminished if they have to travel farther for services. Second, facility integration represents a significant organizational change, and the dislocation, anxiety and diversion of staff attention to the change process may negatively affect patient care. It is important, therefore, not only to check for the positive effect of increasing access (as indicated by increased patient satisfaction), but also to ensure that the converse is not happening-that patient care is not being compromised and patient satisfaction is not declining. In addition, if the integration were successful in expanding access, we would expect it to draw new patients in to the system.

4. **Single standard of care/quality of care:** As a strategy for improving the quality of care for patients, we expect integrated systems to create a single standard of care across the system. This means that wherever patients enter the system, they will be treated under the same policies and clinical protocols, based on best practices. We also expect the system to provide a comprehensive array of services and to coordinate each patient's care across

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providers and across campuses (as indicated by increased patient satisfaction with continuity and coordination). Since one strategy for improving coordination and continuity is to strengthen primary care, we would also expect to see increased enrollment in primary care in integrated systems.

The indicators we used to measure these four dimensions are listed in Figure 1.

The analyses used multiple approaches.

Before and after comparisons: To test our expectations about the effects of integration, we first compared the performance of each integrating system before and after integration. These comparisons enabled us to answer questions about whether the systems were meeting common integration objectives. We used each integrating system's date of integration approval and data system merger to define the before and after, or pre/post, periods for that system. This approach allowed us to take into account the differing lengths of time each system had been integrated at the time of our analysis. Using as many years of data as were available within the fiscal year 1994 to fiscal year 1998 study period, we calculated multiple-year averages for each variable for the periods before and after the approval date for each system. Averaging across years, rather

than analyzing a single year, increased the stability of the estimates of performance. In the basic analysis, we included only systems that had at least one year of post-approval experience – that is, those approved for integration before fiscal year 1998. One difficulty in making pre/post comparisons is that, by definition, there are two separate medical centers before integration and only one after. To resolve this difficulty, we summed the pretest values of the two integrating facilities so that each system had one set of values before as well as after integration.

Comparisons with non-integrating medical centers: Simply comparing integrating systems' performance before and after integration does not answer broader questions about the effectiveness of facility integration as an organizational strategy in VA. In the last four years, there have been many pressures for change in VA in addition to facility integration. Many of the objectives of integration are also broader system objectives – increasing efficiency and increasing primary care enrollment, to name only two. The challenge in assessing the effects of facility integration was to separate the effects of integration from the effects of the larger system changes. Therefore, we also compared the before and after change in performance of integrating systems with the change over the same periods for non-

Figure 1: Effects of Facility Integration

Dimensions of effectiveness	Significant pre/post improvement in integrated systems	Significant differences between integrated and non-integrated systems
Cost savings/system efficiency: • Lower FTEE/adjusted workload • Lower total costs/unit of workload	p<.01	p<.10
Redirection of resources from administrative to clinical care: • Higher clinical (nurses and physicians) FTEE/total FTEE • Higher direct (or clinical) costs /total costs • Higher direct costs/ indirect costs • Higher direct costs/unit workload • Lower indirect (or administrative) costs/ unit workload		
Veteran access to care: • Level of increased patient satisfaction with access • Increased number of patients	p<.01	
Single standard of care/quality of care • Increased primary care enrollment • Patient satisfaction: coordination problems • Patient satisfaction: continuity problems	p<.10	[p<.05] [p<.05]

[ ] indicates comparison systems showed greater improvement

Effects of Facility Integration

integrating medical centers.

To create a comparable comparison group, we identified the VA Medical Center Group (MCG) to which each pre-integration facility belonged and created a proxy comparison hospital by averaging or summing the values of the medical centers in that group on each indicator. We used the same groups for the post-integration comparisons – even though the newly integrated system might fall in a new MCG – to reflect a comparison to trends that the integrating facilities would have experienced if they had not integrated. In this way, each comparison group reflected the VA-wide trends for comparable hospitals for the relevant period of integration. Thus, the number of comparison observations equaled the number of facilities that integrated; systems with two facilities had two comparisons and systems with three facilities had three comparison observations. Here, too, we calculated multiple-year pre/post averages for the comparison hospitals using the integration date of the system for which the comparison was selected to define the pre/post test period. Finally we compared pre/post changes for integrating systems with pre/post changes of the comparison groups to determine if they were changing at different rates.

Subsets of medical centers: Using this design, we analyzed the performance of 18 integrated systems and 38 comparison medical centers as our basic analysis. In addition, we analyzed two subsets of systems (and their accompanying comparison-group medical centers) intended to maximize the likelihood of finding the expected effects of facility integration:

- **Older integrated systems**, defined as the systems approved for integration by September 1996. It takes time to put into place the administrative, organizational and operational changes that are expected to enable a system to meet its integration objectives. Moreover, the integration of two or more medical centers represents a major organizational change. Such changes are disruptive to the system and often result in a dip in performance and increase in costs as the system grapples with and absorbs the change. By looking only at early integrations, we focused on more mature systems that were more likely to have moved beyond the disruptive phases of change. With the latest system

in this group approved for integration in September 1996, all had at least two full years of post-integration experience and data.

- **Operationally integrated systems**, defined as systems in which more than 80% of the managers reported that their policies are the same across campuses or that the department was consolidated so they needed only one set of policies. While age of integration is important, it is not the only determinant of the progress of integration in a system. By looking at systems that have aligned their policies, we focus on those that are operationally integrated and therefore are more likely to have the elements in place to meet their objectives.

These groups are not mutually exclusive.

Measures of performance were drawn from existing VA databases.

The integration of VA medical centers has modest effects.

Integrating systems did not show many large changes, either in comparison to their own performance before integration or to non-integrating hospitals. However, the trends are in a positive direction. Figure 1 shows where we found statistically significant differences. The brackets indicate that the non-integrating medical centers improved significantly more than integrating systems.

- Integrated systems improved staffing efficiency and improved it more than comparison groups. The ratio of staff to workload, as measured by FTEE per adjusted 1000 units of workload, dropped significantly by 12 FTEE in integrating systems (from 69 to 57). It also dropped in comparison systems by 10 (from 65 to 55). However, the drop was significantly greater for integrating systems. This is an important success. Other measures of efficiency and redirection of resources, while not showing significant differences, showed improvement. All cost-related measures of efficiency and redirected resources were significantly weaker before integration in integrating facilities than comparison groups for the same periods – despite having the comparisons drawn from the same MCG, a comparison which we believe is the strongest available. But the differences were fewer and smaller after integration. Integration may have been a key element in enabling the facilities to bring their staffing and cost

performance closer in line with the comparison medical centers, which were previously more efficient. Without integration, their performance might instead have declined.

- Different dynamics seem to hold in terms of access and a single standard of care. On these measures, integrated systems matched or exceeded comparison groups before integration. Both integrated and comparison systems significantly reduced the access problems patients reported on the Customer Satisfaction Survey after the integration date. In integrating systems, the problem rate dropped from .24 to .15, and in comparison systems, it dropped from .23 to .14, an equivalent reduction. Even though integrated systems did not see a greater reduction than comparison groups, the reduction in access problems is positive given early concerns in many systems that integration might be viewed by veterans as reducing access by consolidating to one campus services that had previously been provided at all. On two measures, primary care enrollment and patient satisfaction with continuity, the comparison groups showed significantly greater improvements, but those improvements simply brought them into line with the integrating systems.

Newly Released Organizational Change Primer

Organizational change is a fact of life in today's health care environment. During the past five years, VA has undergone an extensive transformation in order to provide better and more cost-effective health care to veterans. The newly released *Organizational Change Primer* presents information on large-scale organizational change, critical change activities, pitfalls to avoid, and lessons learned from research. The *Primer,* the seventh in HSR&D's Primer series, uses a question-and-answer format to define organizational change, why it is important, and what we can do to manage change. It also provides examples, in addition to further resources and references about organizational change. The *Organizational Change Primer* is available in both electronic and printed formats. For electronic copies, please go to http://www.va.gov/resdev/prt, and for faxed copies call (617) 278-4492 and follow the voice menu instructions.

Primary care enrollment was significantly higher in integrating systems than comparison systems before integration. Comparison systems increased enrollment significantly more after integration, an increase of 7.46 percentage points, from 69.06% to 76.52%. But this only brought them to the level of integrating systems, which increased by 3.53 percentage points, from 73.38% to 76.91%.

- We expected that older systems would show stronger results as the integration had more time to settle in. However, looking only at integrating systems – those approved for integration before fiscal year 1997 – our expectations were not confirmed.

- We also expected operationally integrated systems – those with policies shared across campuses in more than 80% of their services – to show stronger results because they were integrated more extensively. We found a stronger effect of efficiency improvements, but no significant differences in other areas.

In summary, effects on performance are modest and should be considered in the context of the high costs of facility integration, such as change anxiety, disruption and dislocation issues. System leaders may want to explore alternative strategies for accomplishing the same efficiencies, service consolidations, single standards of care, and improved access without fully merging their facilities.

News You Can Use: Information Resources on Health Systems & Service Lines

By Elaine C. Alligood, MLS

From Project Hope, publisher of *Health Affairs* **two articles of interest:**

The Cost of Health System Change: Public Discontent in Five Nations
Amid widely divergent systems and cultural norms of health care, citizens express surprisingly similar concerns about the future. *By Karen Donelan, Robert J. Blendon, Cathy Schoen, Karen Davis, and Katherine Binns.*
This paper presents data from surveys of about 1,000 adults conducted during April-June 1998 in each of five countries-Australia, Canada, New Zealand, the United Kingdom, and the United States-to measure public satisfaction with health care. In no nation is a majority content with the health care system. Different systems pose different problems: In systems with universal coverage, dissatisfaction is with the level of funding and administration, including queues. In the United States, the public is primarily concerned with financial access.
http://www.projhope.org/HA/mayjun99/donelan.htm

How Will the Internet Change Our Health System?
By Jeff Goldsmith
Those who make their living forecasting change in social institutions are frequently humbled by the actual flow of events. Developments that seem inevitable (such as "artificial intelligence" or the picture phone) seem to take forever to happen, while seemingly unstoppable institutions or innovations (such as physician practice management firms) suddenly collapse. Sometimes, however, innovations spring, fully blown and unheralded, seemingly from out of nowhere. The Internet is one of these.
http://www.projhope.org/ha/bonus/190112.htm

Recent articles:
Claflin N. *Computerized interdisciplinary assessment.* *Journal of Healthcare Quality* 2000; Mar-Apr;22(2):25-33. [VA author]

Frank SR. *Digital health care—the convergence of health care and the Internet.* *Journal of Ambulatory Care Management* 2000; Apr;23(2):8-17.

Green G. *Clinical service lines bring patients into focus.* *Nursing Management* 2000; Mar;31(3):40-3.

Hagland M. *What we've learned about carving out health care.* *Business Health* 2000; 18(1):28-31

McLaughlin CP, Kaluzny AD. *Building client centered systems of care: choosing a process direction for the next century.* *Health Care Management Review* 2000; Winter;25(1):73-82. Review.

PricewaterhouseCoopers Publishes Report on VHA Organizational Transformation

Transforming Government: The Revitalization of the Veterans Health Administration is a report newly published by PricewaterhouseCoopers Endowment for the Business of Government, an organization that advances knowledge on how to improve public sector effectiveness. The report, written by Gary J. Young, JD, PhD, Senior Researcher at VA's Health Services Research and Development Service's Management Decision and Research Center, is significantly based on a case study investigation of the VHA transformation. This case study, supported in part by the National Science Foundation, revealed the opportunities and problems organizations face in making large-scale transformations. Dr. Young's report provides a broad view of the VHA transformation, including the circumstances that led to the reorganization and the lessons learned thereafter. These lessons speak to many issues, such as leadership, planning, external and internal environments, communication, training and education, and operational flexibility. The VHA organizational transformation is worthy of careful study for several reasons, not the least of which is that VHA is the second largest agency in the federal government, and the size and scope of its transformation is a remarkable achievement of large-scale organizational change in the public sector. To order or download a copy of the report, visit the Endowment website at: http://www.endowment.pwcglobal.com.